18. Explain the different types of function arguments in Python with examples.

19. Compare and contrast lists, tuples, and dictionaries with examples.

20. Write a Python program to read a file, count the number of words, and display frequency of each word.

NOVEMBER/DECEMBER 2025

23UIM52 — PYTHON PROGRAMMING

Time : Three hours Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

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1. Write any two features of Python.

2. Define literals with example.

3. What is the purpose of pass statement?

4. When will you use iterative statements?

5. How do you call a function in python?

6. Write the syntax of dir() function.

7. List any two immutable data types in Python.

8. What is a tuple?

9. What is the purpose of the with keyword in file handling?

10. Write the output of print ("Hello" *3).

SECTION B — (5 × 5 = 25 marks)

Answer ALL questions

11. (a) Explain constants, variables and identifiers with examples.

Or

(b) Write a Python program to swap two numbers using variables.

12. (a) Analyze the different conditional branching statements with syntax.

Or

(b) Write a Python program to find the largest of three numbers using if-elif-else.

13. (a) Discuss any five string methods in a string object.

Or

(b) Write a recursive Python function to calculate factorial of a number.

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14. (a) Write a Python program to demonstrate list methods append (), insert(), remove(), and pop().

Or

(b) Differentiate tuples and lists with suitable examples.

15. (a) Discuss briefly about the Python file modes with suitable examples.

Or

(b) Write a Python program to read the content of a file and display it line by line.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Explain the history of Python and discuss its salient features with applications.

17. Write a Python program using nested loops to print a multiplication table (1-10).